

ORIGINAL



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MEMORANDUM

RECEIVED
AZ CORP COMMISSION
DOCKET CONTROL

TO: Docket Control

FROM: Steven M. Olea
Director
Utilities Division

EA for SMD

2013 DEC 16 PM 3 09

DATE: December 16, 2013

RE: STAFF REPORT FOR ANTELOPE WATER COMPANY'S APPLICATION
FOR A PERMANENT RATE INCREASE (DOCKET NO. W-02005A-13-0201)

Attached is the Staff Report for Antelope Water Company's application for a permanent rate increase. Staff recommends approval of the rate increase application using Staff's recommended rates and charges.

Any party who wishes may file comments to the Staff Report with the Commission's Docket Control by 4:00 p.m. on or before December 26, 2013.

SMO:BCA:red\ML

Originator: Brendan C. Aladi

Arizona Corporation Commission
DOCKETED

DEC 16 2013

DOCKETED BY	<i>[Signature]</i>
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Service List for: Antelope Water Company
Docket No. W-02005A-13-0201

Mr. John Kulberg
Antelope Water Company
PO Box 843
Wellton, Arizona 85356

**STAFF REPORT
UTILITIES DIVISION
ARIZONA CORPORATION COMMISSION**

ANTELOPE WATER COMPANY

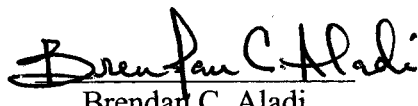
DOCKET NO. W- 02005A-13-0201

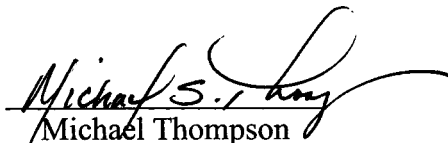
**APPLICATION FOR
A PERMANENT RATE INCREASE**

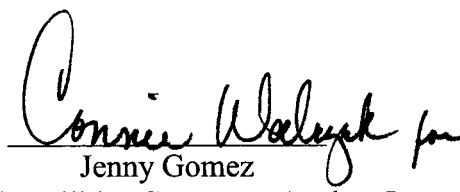
DECEMBER 16, 2013

STAFF ACKNOWLEDGMENT

The Staff Report for Antelope Water Company, Docket No. W-02005A-13-0201 was the responsibility of the Staff members listed below. Brendan C. Aladi was responsible for the financial review and analysis of the Company's application, recommended revenue requirement, rate base and rate design. Michael Thompson was responsible for the engineering and technical analysis. Jenny Gomez was responsible for reviewing the Commission's records on customer complaints filed with the Commission.


Brendan C. Aladi
Public Utilities Analyst III


Michael Thompson
Utilities Engineer


Jenny Gomez
Public Utilities Consumer Analyst I

**EXECUTIVE SUMMARY
ANTELOPE WATER COMPANY
DOCKET NO. W-02005A-13-0201**

Antelope Water Company ("Antelope" or "Company") filed an application for a permanent rate increase with the Arizona Corporation Commission ("Commission") on June 20, 2013. The application was deemed sufficient on August 5, 2013.

Antelope is a class E not-for-profit Arizona public service corporation that provides potable water service to approximately 63 metered customers. The Company is located approximately thirty miles east of the city of Yuma off Interstate Highway 8, in Yuma County, Arizona. The current permanent rates were authorized in Decision No. 59440, dated December 20, 1995.

The Company proposed a \$4,536 or a 15.60 percent increase over the test year revenue of \$29,070 to \$33,606¹. Company proposed revenue would result in an operating loss of \$6,250. The Company's proposed rates would yield a positive cash flow of \$4,903. The Company has proposed an original cost rate base ("OCRB") of negative \$213,867. The Company did not propose a fair value rate base that differs from its OCRB. The Company's proposed rates would increase the typical residential 5/8 x 3/4-inch meter bill with a median usage of 10,919 gallons from \$26.38 to \$33.88, for an increase of \$7.50, or 28.4 percent.

Staff recommends a \$4,305 or a 14.69 percent increase over the Staff adjusted test year revenue of \$29,301 to \$33,606. Staff's recommended revenues would result in an operating income of \$6,304, for a positive cash flow of \$4,552. Staff's recommended rates would increase the typical residential 5/8 x 3/4-inch meter bill with a median usage of 10,919 gallons from \$26.38 to \$26.79, for an increase of \$0.41, or 1.5 percent.

STAFF RECOMMENDATIONS

Staff recommends:

1. The approval of its recommended rates and charges as shown in Schedule BCA-4.
2. That the Company be ordered to file with Docket Control, as a compliance item in this Docket, a tariff schedule of its new rates and charges within 30 days after the effective date of the Decision in this proceeding.
3. That the Company be ordered to use the depreciation rates presented in Table C of the attached Engineering Report.
4. That Antelope increase its storage capacity by a minimum of 15,000 gallons in order to meet the water demands of the current customer base. Staff further

¹Antelope Water Company proposed rates would actually produce total revenue of \$34,594, resulting in the difference of \$988 (ie \$34,594 - \$33,606).

recommends that Antelope file with Docket Control, as a compliance item in this docket by December 31, 2014, a copy of the ADEQ Approval of Construction ("AOC") for the additional storage capacity. The installation of the AEA storage tank will rectify the storage inadequacy.

5. That Antelope file with Docket Control, as a compliance item in this docket and within 90 days of the effective date of a decision in this proceeding, provide documentation demonstrating that the repair or replacement of the existing booster pump discharge pipe flow meter.
6. That Antelope begin monitoring water loss, on a monthly basis, by coordinating the readings of the booster pump discharge flow meter, filter backwash, and individual customer meters and reporting the results in its Commission Annual Reports going forward. Staff further recommends, in the event water loss reported in any Annual Report is greater than 10 percent, that Antelope shall prepare a report containing a detailed analysis and plan to reduce water loss to less than 10 percent. If Antelope believes it is not cost effective to reduce the water loss to less than 10 percent, Antelope should submit a detailed cost benefit analysis to support its opinion. In no case shall the Company allow water loss to be greater than 15 percent. The water loss reduction report shall be docketed as a compliance item no later than March 31st of the year following the excessive water loss.
7. That Antelope file with Docket Control, as a compliance item in this docket and within 90 days of the effective date of a decision in this proceeding, at least three BMPs in the form of tariffs that substantially conform to the templates created by Staff for Commission's review and consideration. The templates created by Staff are available on the Commission's website at <http://www.azcc.gov/Divisions/Utilities/forms.asp>. Staff further recommends that a maximum of two BMPs may come from the "Public Awareness/Public Relations" or "Education and Training" categories. The Company may request cost recovery of the actual costs associated with the BMPs implemented in its next general rate application.

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ATTACHMENT

Engineering Report	A
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FACT SHEET

Company:

Type of Ownership: Not-for-Profit Corporation.

Antelope Water Company ("Company") is a class E not-for-profit Arizona public service corporation that provides potable water service to approximately 63 metered customers.

Rates:

Permanent rate increase application filed: June 20, 2013.

Current test year ended: December 31, 2012.

Prior test year ended: September 30, 1994.

The application became sufficient on August 5, 2013.

	Company Current <u>Rates</u>	Company Proposed <u>Rates</u>	Staff Recommended <u>Rates</u>
Monthly Minimum Rates			
Residential Monthly Minimum Charge			
5/8 x 3/4-inch meter	\$ 11.50	\$ 17.50	\$ 13.50
3/4-inch meter	\$ 13.00	\$ 19.00	\$ 13.50
1-inch meter	\$ 20.00	\$ 26.00	\$ 33.75
1 1/2-inch meter	\$ 28.50	\$ 34.50	\$ 67.50
2-inch meter	\$ 60.00	\$ 66.00	\$ 108.00
3-inch meter	\$ 120.00	\$ 126.00	\$ 216.00
4-inch meter	\$ 250.00	\$ 256.00	\$ 337.50
6-inch meter	\$ 500.00	\$ 506.00	\$ 675.00
(Gallons included in the minimum)	1,000	1,000	0

Fact Sheet (Continued)

	<u>Company Current Rates</u>	<u>Company Proposed Rates</u>	<u>Staff Recommended Rates</u>
Commodity Rates (Per 1,000 gallons)			
<u>5/8 x 3/4 & 3/4-inch meters</u>			
0 to 1,000 gallons	\$ 0.00	N/A	N/A
Over 1,000 gallons	\$ 1.50	N/A	N/A
<u>5/8 x 3/4 & 3/4-inch meters</u>			
0 to 1,000 gallons	N/A	\$ 0.00	N/A
Over 1,000 gallons	N/A	\$ 1.50	N/A
<u>All Meter Sizes</u>			
0 to 5,000 gallons	\$ N/A	N/A	\$ 1.00
5,001 to 15,000 gallons	\$ N/A	N/A	\$ 1.40
Over 15,000 gallons	\$ N/A	N/A	\$ 2.10

Typical 5/8x3/4 or 3/4-inch residential bill

Average use (18,880 gallons)	\$ 38.32	\$ 45.82	\$ 40.65
Median use (10,919 gallons)	\$ 26.38	\$ 33.88	\$ 26.79

Customers

Average Number of customers in the current test year (12/31/12): 63

Notifications

Affidavit of mailing for the Customer Notification was filed on June 18, 2013.

SUMMARY OF FILING

The test year results as adjusted by Utilities Division Staff ("Staff") for Antelope Water Company ("Antelope" or "Company") show total operating revenue of \$29,301, an operating income of \$2,224, for a positive cash flow of \$472, as shown on Schedule BCA-1. The Original Cost Rate Base ("OCRB") as adjusted by Staff is negative \$5,717.

The Company proposed a \$4,536 or a 15.60 percent increase over the test year revenue of \$29,070 to \$33,606. However, Antelope proposed rates would actually produce total revenue of \$34,594, resulting in the difference of \$988 (ie \$34,594 - 33,606). The Company proposed revenue would result in an operating loss of \$6,250. The Company's proposed rates would yield a positive cash flow of \$4,903. The Company proposed an original cost rate base ("OCRB") of negative \$213,867. The Company did not propose a fair value rate base that differs from its OCRB. The Company's proposed rates would increase the typical residential 5/8 x 3/4-inch meter bill with a median usage of 10,919 gallons from \$26.38 to \$33.88, for an increase of \$7.50, or 28.4 percent.

Staff recommends a \$4,305 or a 14.69 percent increase over the Staff adjusted test year revenue of \$29,301 to \$33,606. Staff's recommended revenues would result in an operating income of \$6,304, for a positive cash flow of \$4,552. Staff recommends an OCRB of negative \$5,717. Staff's recommended rates would increase the typical residential 5/8 x 3/4-inch meter bill with a median usage of 10,919 gallons from \$26.38 to \$26.79, for an increase of \$0.41, or 1.5 percent.

Staff was unable to derive the revenue requirement by applying a rate of return on rate base because the Company's negative rate base did not produce sufficient revenue for the Company's operating needs.

According to the application, the Company requests a rate increase due to increases in purchased water cost, billing and accounting expenses. Antelope has not been in for a rate increase since 1994.

BACKGROUND

In the prior rate case for the test year ended September 30, 1994, Antelope provided water service to an average of 53 metered customers.

Antelope is a class E not-for-profit, Arizona public service corporation that provides potable water service to approximately 63 metered customers. The Company is located approximately thirty miles east of the city of Yuma off Interstate Highway 8, in Yuma County, Arizona. The current permanent rates were authorized in Decision No. 59440, dated December 20, 1995.

Antelope filed an application for a rate increase with the Arizona Corporation Commission ("Commission") on June 20, 2013. On August 5, 2013, Staff issued a Letter of Sufficiency.

CONSUMER SERVICES

Staff reviewed the Commission's records for the period beginning January 1, 2010 to September 16, 2013, and found no complaints and no opinions filed against the rate increase request.

The Company's affidavit of mailing "Customer Notification" was filed on June 18, 2013.

COMPLIANCE

The Utilities Division Compliance Section shows no outstanding compliance issues.

Antelope is current on its property and sales tax payment.

Antelope is in good standing with the Corporations Division of the Commission.

ENGINEERING ANALYSIS AND RECOMMENDATIONS

Staff inspected Antelope's plant facilities on June 25, 2013. A complete discussion of Staff's technical findings and recommendations and a complete description of the water system are provided in the attached Engineering Report.

RATE BASE

Staff's adjustments increased the Company's proposed rate base by \$208,152, from negative \$213,867 to negative \$5,717, as shown on Schedule BCA-2, page 1. Details of Staff's adjustments are discussed below.

Plant in Service

Adjustment A decreases plant in service by \$777 from \$357,610 to \$356,833, as shown on Schedule BCA-2, pages 1 and 2. These adjustments properly reflect the plant in service account balances per Decision No. 59440 and the removal of retired plant.

Intangibles – Adjustment "a" decreases this account by \$23,023 from \$26,973 to \$3,950, as shown on Schedule BCA-2, pages 2 and 3. Staff decreased this account by \$23,023 to reflect the transfer of \$6,620 to structures and improvements, \$4,139 to Electrical Pumping Equipment, and \$12,264 to Water Treatment Plant.

Franchises – Adjustment “b” decreases this account by \$1,000 from \$1,000 to \$0, as shown on Schedule BCA-2, pages 2 and 3. Staff decreased this account by \$1,000 to reflect the transfer of \$1,000 to Water Treatment Plant.

Structures and Improvements – Adjustment “c” increases this account by \$6,620 from \$37,509 to \$44,129 as shown on Schedule BCA-2, pages 2 and 3. Staff increased this account by \$6,620 to reflect the transfer of \$6,620 from Intangibles to Structures and Improvements.

Electrical and Pumping Equipment – Adjustment “d” increases this account by \$4,139 from \$18,337 to \$22,476 as shown on Schedule BCA-2, pages 2 and 3. Staff increased this account by \$4,139 to reflect the transfer of \$4,139 from Intangibles to Electrical Pumping Equipment.

Water Treatment Equipment – Adjustment “e” increases this account by \$13,264 from \$72,297 to \$85,561 as shown on Schedule BCA-2, pages 2 and 3. Staff increased this account by \$13,264 to reflect the transfer of \$13,264 from Intangibles to Water Treatment Plant.

Office Furniture and Equipment – Adjustment “f” decreases this account by \$118 from \$118 to \$0, as shown on Schedule BCA-2, pages 2 and 3. Staff decreased this account to \$0, to reflect the removal of fully depreciated and retired plant.

Other Plant and Miscellaneous Equipment – Adjustment “g” decreases this account by \$659 from \$659 to \$0, as shown on Schedule BCA-2, pages 2 and 3. Staff decreased this account to \$0, to properly reflect account balance per Decision No. 59440.

Other Rate Base Items

Accumulated Depreciation

Accumulated Depreciation - Adjustment B increases accumulated depreciation by \$2,643 from \$284,139 to \$286,782, as shown on Schedule BCA-2, pages 1 and 4.

Accumulated Amortization of contribution-in-aid-of-construction (“CIAC”)

Antelope did not claim any accumulated amortization of CIAC. Adjustment C increases amortization of CIAC account by \$209,050 from \$0 to \$209,050, as shown on Schedule BCA-2, pages 1 and 5. This adjustment reflects Staff’s recognition of CIAC amortization since the test year in the prior rate case.

Working Capital

Antelope did not claim any working capital allowance. Staff’s adjustments D and E resulted in a net increase to working capital of \$2,520, from \$0 to \$2,520, as shown on Schedule BCA-2, pages 1 and 5. Cash working capital was calculated by using the formula method which

equals one-eighth of the operating expenses less depreciation, taxes, purchased power and purchased water expenses plus one twenty-fourth of purchased power and purchased water expenses.

OPERATING INCOME STATEMENT

Operating Revenue

Staff's adjustment to total operating revenue resulted in a net increase of \$231, from 28,735 to \$28,966, as shown on Schedule BCA-3, page 1. Details of Staff's adjustments are discussed below.

Metered Water Revenue – Adjustment A increases metered water revenue by \$231, from 29,070 to \$29,301, as shown on Schedule BCA-3, page 1 and 2. Staff's adjustment reflects Staff's calculation of the metered water revenue using the billing determinants provided by the Company.

Operating Expenses

Staff's adjustments to operating expenses resulted in a net decrease of \$12,779, from \$39,856 to \$27,077, as shown on Schedule BCA-3, page 1. Details of Staff's adjustments are presented below.

Repairs and Maintenance Expense – Adjustment B decreases repairs and maintenance expense by \$396, from \$3,038 to \$2,642, as shown on Schedule BCA-3, pages 1 and 2. This adjustment reflects Staff's calculation of repairs and maintenance based on the documentation submitted by the Company.

Water Testing Expense – Adjustment C decreases water testing expense by \$120, from \$1,442 to \$1,322, as shown on Schedule BCA-3, pages 1 and 2. This adjustment reflects the annual water testing costs determined in the attached Engineering Report.

Rate Case Expense – Adjustment D increases rate case expense by \$454, from \$46 to \$500, as shown on Schedule BCA-3, pages 1 and 2. This adjustment reflects a reasonable normalized amount of rate case expense based on a five year normalization period.

Depreciation Expense – Adjustment E decreases depreciation expense by \$12,905, from \$14,285 to \$1,380, as shown on Schedule BCA-3, pages 1 and 3. Staff's depreciation expense reflects application of Staff's recommended depreciation rates to Staff's recommended plant balances.

Property Tax Expense – Adjustment E increases property tax expense by \$188, from \$1,343 to \$1,531 as shown on Schedule BCA-3, pages 1 and 4. Staff calculated its property tax

amount using a modified version of the Arizona Department of Revenue's ("ADOR") property tax method.

CASH FLOW AND OPERATING MARGIN

The Company proposed rates and charges would provide an operating loss of \$6,250 and would yield a positive cash flow of \$4,903.

Staff's recommended rates and charges would provide an operating income of \$6,304 and would yield a cash flow of \$4,552 and an operating margin of 18.76 percent.

REVENUE REQUIREMENT

The Company's narrative portion of the application states that the Company needs a rate increase to pay for rising operating costs.

Antelope has an adjusted rate base of negative \$5,717. Consequently, Staff elects to use cash flow in calculating the revenue requirement. Staff was unable to derive the revenue requirement by applying a rate of return on rate base because the Company's negative rate base did not produce any revenue for the Company's operating needs.

Staff recommends a \$4,305, or a 14.69 percent, increase over the Staff adjusted test year revenue of \$29,301 to \$33,606. Staff's recommended revenues would result in an operating income of \$6,304 for an 18.76 percent operating margin as shown on Schedule BCA-1.

Staff's total revenue requirement of \$33,606, provides the Company with sufficient cash flow to meet normal operating expenses and fund other contingencies.

RATE DESIGN

Schedule BCA-4 presents a complete list of the Company's present, proposed, and Staff's recommended rates and charges.

The Company requested an increase in the total operating revenue of \$4,536. This increase would result in total revenue of \$33,606. However, Antelope proposed rates would actually produce total revenue of \$34,594, resulting in the difference of \$988 (i.e. \$34,594 - \$33,606).

The Company's proposed rates would increase the typical residential 5/8 x 3/4-inch meter bill with a median usage of 10,919 gallons from \$26.38 to \$33.88, for an increase of \$7.50, or 28.4 percent, as shown on Schedule BCA-5.

Staff's recommended rates would increase the typical residential 5/8 x 3/4-inch meter bill with a median usage of 10,919 gallons from \$26.38 to \$26.79, for an increase of \$0.41, or 1.50 percent, as shown on Schedule BCA-5.

MISCELLANEOUS SERVICE CHARGES

Staff recommends elimination of the \$40 Establishment after hour service charge. Staff agrees that an additional fee for service provided after normal business hours is appropriate when such service is provided at the customer's request. Such a tariff compensates the utility for additional expenses incurred from providing after-hours service. Moreover, Staff concludes that it is appropriate to apply an after-hours service charge in addition to the charge for any utility service provided after hours at the customer's request. Therefore, Staff recommends elimination of the Establishment (after hours) charges. Instead, Staff recommends the creation of a separate \$40.00 after-hours service charge.

For example, under Staff's proposal, a customer would be subject to a \$20 Establishment fee if it is done during normal business hours, but would pay an additional \$40.00 after-hours fee if the customer requested that the establishment be done after normal working hours.

SERVICE LINE AND METER INSTALLATION CHARGES

The Company has not requested any changes to its service line and meter installation charges as shown on page 12 of the Engineering Report.

Staff has recommended service line and meter installation charges based upon its analysis of costs as discussed in the Engineering Report. Staff recommends approval of Staff's service line and meter installation charges as shown on Schedule BCA-4.

STAFF RECOMMENDATIONS

Staff recommends:

1. The approval of its recommended rates and charges as shown in Schedule BCA-4.
2. That the Company be ordered to file with Docket Control, as a compliance item in this Docket, a tariff schedule of its new rates and charges within 30 days after the effective date of the Decision in this proceeding.
3. That the Company be ordered to use the depreciation rates presented in Table C of the attached Engineering Report.
4. That Antelope increase its storage capacity by a minimum of 15,000 gallons in order to meet the water demands of the current customer base. Staff further recommends that Antelope file with Docket Control, as a compliance item in this

docket by December 31, 2014, a copy of the ADEQ Approval of Construction for the additional storage capacity. The installation of the AEA storage tank will rectify the storage inadequacy.

5. That Antelope file with Docket Control, as a compliance item in this docket and within 90 days of the effective date of a decision in this proceeding, provide documentation demonstrating that the repair or replacement of the existing booster pump discharge pipe flow meter.
6. That Antelope begin monitoring water loss, on a monthly basis, by coordinating the readings of the booster pump discharge flow meter, filter backwash, and individual customer meters and reporting the results in its Commission Annual Reports going forward. Staff further recommends, in the event water loss reported in any Annual Report is greater than 10 percent, that Antelope shall prepare a report containing a detailed analysis and plan to reduce water loss to less than 10 percent. If Antelope believes it is not cost effective to reduce the water loss to less than 10 percent, Antelope should submit a detailed cost benefit analysis to support its opinion. In no case shall the Company allow water loss to be greater than 15 percent. The water loss reduction report shall be docketed as a compliance item no later than March 31st of the year following the excessive water loss.
7. That Antelope file with Docket Control, as a compliance item in this docket and within 90 days of the effective date of a decision in this proceeding, at least three BMPs in the form of tariffs that substantially conform to the templates created by Staff for Commission's review and consideration. The templates created by Staff are available on the Commission's website at <http://www.azcc.gov/Divisions/Utilities/forms.asp>. Staff further recommends that a maximum of two BMPs may come from the "Public Awareness/Public Relations" or "Education and Training" categories. The Company may request cost recovery of the actual costs associated with the BMPs implemented in its next general rate application.

Antelope Water Company

Docket No. W-02005A-13-0201

Test Year Ended: December 31, 2012

Schedule BCA-1

SUMMARY OF FILING

	-- Present Rates --		-- Proposed Rates --	
	Company as Filed	Staff as Adjusted	Company as Filed	Staff as Adjusted
Revenues:				
Metered Water Revenue	\$28,735	\$28,966	\$33,271	\$33,271
Unmetered Water Revenue	0	0	0	0
Other Water Revenues	335	335	335	335
Total Operating Revenue	\$29,070	\$29,301	\$33,606	\$33,606
Operating Expenses:				
Operation and Maintenance	\$24,228	\$24,166	\$24,228	\$24,166
Depreciation	14,285	1,380	14,285	1,380
Property & Other Taxes	1,343	1,531	1,343	1,756
Income Tax	0	0	0	0
Total Operating Expense	\$39,856	\$27,077	\$39,856	\$27,302
Operating Income/(Loss)	(\$10,786)	\$2,224	(\$6,250)	\$6,304
Authorized Debt Service	\$ 3,132	\$ 3,132	\$ 3,132	\$ 3,132
Rate Base O.C.L.D.	(\$213,867)	(\$5,717)	(\$213,867)	(\$5,717)
Rate of Return - O.C.L.D.	N/M	N/M	N/M	N/M
Operating Margin	N/M	7.59%	N/M	18.76%
Cash Flow	\$ 367	\$ 472	\$ 4,903	\$ 4,552

Antelope Water Company

Docket No. W-02005A-13-0201

Test Year Ended: December 31 2012

Schedule BCA-2

Page 1 of 5

RATE BASE

	----- Original Cost -----		
	Company	Adjustment	Staff
Plant in Service	\$ 357,610	(\$777) A	\$ 356,833
Less:			
Accum. Depreciation	284,139	2,643 B	286,782
Net Plant	\$ 73,471	\$ (3,420)	\$ 70,051
Less:			
Plant Advances	0	0	0
Service Line and Meter Advances	235	0	235
Total Advances	235	0	235
Contributions Gross	287,103	0	287,103
Less:			
Amortization of CIAC	0	209,050 C	209,050
Net CIAC	287,103	(209,050)	78,053
Total Deductions	\$ 287,338	\$ (209,050)	\$ 78,288
Plus:			
1/24 Power	0	\$251 D	\$251
1/8 Operation & Maint.	0	2,269 E	2,269
Inventory	0	0	0
Prepayments	0	0	0
Total Additions	\$ -	\$ 2,520	\$ 2,520
Rate Base	\$ (213,867)	\$ 208,150	\$ (5,717)

Explanation of Adjustment:

- A - Refer to Schedule BCA-2, Page 2
- B - Refer to Schedule BCA-2, Page 3
- C - Refer to Schedule BCA-2, Page 4
- D - Refer to Schedule BCA-2, Page 4
- E - Refer to Schedule BCA-2, Page 4

Antelope Water Company

Docket No. W-02005A-13-0201

Test Year Ended: I December 31, 2012

Schedule BCA-2

Page 2 of 5

PLANT ADJUSTMENTS

	Company Exhibit	Adjustment		Staff Adjusted
301 Intangibles/Organization	\$26,973	(\$23,023)	a	\$3,950
302 Franchises	1,000	(1,000)	b	0
303 Land & Land Rights	3,000	0		3,000
304 Structures & Improvements	37,509	6,620	c	44,129
307 Wells & Springs	0	0		0
311 Electrical Pumping Equipment	18,337	4,139	d	22,476
320.1 Water Treatment Plant	72,297	13,264	e	85,561
330 Distribution Reservoirs & Standpipes	0	0		0
330.1 Storage Tank	122,749	0		122,749
330.2 Pressure Tank	0	0		0
331 Transmission & Distribution Mains	19,523	0		19,523
333 Services	50,180	0		50,180
334 Meters & Meter Installations	5,265	0		5,265
335 Hydrants	0	0		0
336 Backflow Prevention Devices	0	0		0
339 Other Plant and Misc. Equipment	0	0		0
340 Office Furniture & Equipment	118	(118)	f	0
341 Transportation Equipment	0	0		0
343 Tools Shop & Garage Equipment	0	0		0
344 Laboratory Equipment	0	0		0
345 Power Operated Equipment	0	0		0
346 Communication Equipment	0	0		0
347 Miscellaneous Equipment	0	0		0
348 Other Tangible Plant	659	(659)	g	0
105 C.W.I.P.	0	0		0
TOTALS	\$357,610	(\$777)	A	\$356,833

STAFF ADJUSTMENTS

a -	INTANGIBLES/ORGANIZATION - Per Company	\$26,973	
	Per Staff	3,950	<u>(\$23,023)</u>

To properly reflect account balance per Decision No. 59440
and transfer of \$23,023 to the following accounts:

\$	6,620	to structures and improvements.
\$	4,139	to electrical pumping equipment.
\$	12,264	to water treatment plant.
\$	23,023	

b -	FRANCHISES - Per Company	\$1,000	
	Per Staff	0	<u>(\$1,000)</u>

To properly reflect account balance per Decision No. 59440
and tranfer of \$1,000 to water treatment plant account.

c -	STRUCTURES AND IMPROVEMENTS - Per Company	\$37,509	
	Per Staff	44,129	<u>\$6,620</u>

To reflect the transfer of \$6,620 from intangibles
to structures and improvements account.

d -	ELECTRICAL AND PUMPING EQUIPMENT - Per Company	\$18,337	
	Per Staff	22,476	<u>\$4,139</u>

To reflect the transfer of \$4,319 from intangibles
to electrical and pumping equipment account.

e -	WATER TREATMENT PLANT - Per Company	\$72,297	
	Per Staff	85,561	<u>\$13,264</u>

To reflect the transfer of \$12,264 from intangibles and \$1,000
from franchise account to water treatment plant.

f -	OFFICE FURNITURE AND EQUIPMENT - Per Company	\$118	
	Per Staff	0	<u>(\$118)</u>

To reflect the removal of fully depreciated and retired plant.

g -	OTHER TANGIBLE PLANT - Per Company	\$659	
	Per Staff	0	<u>(\$659)</u>

To properly reflect account balance per Decision No. 59440.

ACCUMULATED DEPRECIATION ADJUSTMENT

	<u>Amount</u>
Accumulated Depreciation - Per Company	\$ 284,139
Accumulated Depreciation - Per Staff	<u>286,782</u>
Total Adjustment	B <u><u>\$2,643</u></u>

ACCT		ACCUMULATED DEPRECIATION		
No.	Description	Company Application	Staff Adjustment	Staff Calculated
301	Organization	\$ 21,267	\$ (21,267)	\$ -
302	Franchise	\$ -	\$ -	\$ -
303	Land and Land Rights	-	-	-
304	Structures and Improvements	28,765	5,703	34,468
307	Wells and Srings	-	-	-
311	Electrical Pumping Equipment	14,273	3,433	17,706
320	Water Treatment Equipment	62,223	21,980	84,203
330	Distribution Reservoirs & Standpipes	-	-	-
330.1	Storage Tank	95,174	(5,630)	89,544
330.2	Pressure Tank	-	-	-
331	Transmission and Distribution Mains	19,523	-	19,523
333	Services	38,262	(1,881)	36,381
334	Meters and Meter Installation	4,534	423	4,957
335	Hydrants	-	-	-
339	Other Plant and Miscellaneous Equipment	-	-	-
340	Office Furniture and Fixtures	118	(118)	-
340.1	Computers and Software	-	-	-
341	Transportation Equipment	-	-	-
343	Tools and Work Equipment	-	-	-
345	Power Operated Equipment	-	-	-
346	Communications Equipment	-	-	-
348	Other Tangible Plant	-	-	-
	Total	<u>\$ 284,139</u>	<u>2,643</u>	<u>\$ 286,782</u>

STAFF PLANT ADJUSTMENTS

C -	AMORTIZATION OF CIAC - Per Company	0	
	Per Staff	<u>209,050</u>	<u>\$ 209,050</u>

To reflect amortization of contribution in aid of construction since the test year in the prior rate case.

D -	WORKING CAPITAL (1/24 Purchased Pwr & Wtr) Per Company	\$0	
	Per Staff	<u>\$251</u>	<u>\$ 251</u>

To reflect Staff's calculation of cash working capital based on Staff's recommendations for purchased power and purchase water.

E -	WORKING CAPITAL (1/8 operation & Maint exp.) Per Company	\$0	
	Per Staff	<u>2,269</u>	<u>\$ 2,269</u>

To reflect Staff's calculation of cash working capital based on Staff's recommendations for operation and maintenance expense (excluding purchased power and purchased water expenses).

STATEMENT OF OPERATING INCOME

	Company Exhibit	Staff Adjustments	Staff Adjusted
Revenues:			
461 Metered Water Revenue	\$28,735	\$231 A	\$28,966
460 Unmetered Water Revenue	0	0	0
474 Other Water Revenues	335	0	335
Total Operating Revenue	\$29,070	\$231	\$29,301
Operating Expenses:			
601 Salaries and Wages	\$0	\$0	\$0
610 Purchased Water	2,891	0	2,891
615 Purchased Power	3,122	0	3,122
618 Chemicals	1,095	0	1,095
620 Repairs and Maintenance	3,038	(396) B	2,642
621 Office Supplies & Expense	381	0	381
630 Outside Services	10,159	0	10,159
635 Water Testing	1,442	(120) C	1,322
641 Rents	24	0	24
650 Transportation Expenses	0	0	0
657 Insurance - General Liability	1,933	0	1,933
665 Regulatory Commission Expense	0	0	0
666 Regulatory Commission Expense - Rate Case	46	454 D	500
675 Miscellaneous Expense	97	0	97
403 Depreciation Expense	14,285	(12,905) E	1,380
408 Taxes Other Than Income	0	0	0
408.11 Property Taxes	1,343	188 F	1,531
409 Income Tax	0	0	0
Total Operating Expenses	\$39,856	(\$12,779)	\$27,077
OPERATING INCOME/(LOSS)	(\$10,786)	\$13,010	\$2,224

STAFF ADJUSTMENTS

A -	METERED WATER REVENUE - Per Company	\$28,735	
	Per Staff	28,966	\$231

To add \$231 in metered water revenue per Company's submitted bill count.

B -	REPAIRS AND MAINTENANCE - Per Company	\$3,038	
	Per Staff	2,642	(\$396)

To reflect Staff's computation of repairs and maintenance.

C -	WATER TESTING - Per Company	\$1,442	
	Per Staff	1,322	(\$120)

To reflect annual water testing expense, per Staff's Engineering report.

D -	REGULATORY COMMISSION EXPENSE (Rate Case) - Per Company	\$46	
	Per Staff	500	\$454

To reflect a reasonable normalized amount of rate case expense based on five years between rate cases.

\$	2,500	Rate Case Expense
	5	Divided by 5 years
\$	500	Annual Rate Case Expense

STAFF ADJUSTMENTS (Cont.)

E - DEPRECIATION - Per Company \$14,285
Per Staff 1,380 (\$12,905)

To reflect application of Staff's recommended depreciation rates to
Staff's recommended plant, by account.

Pro Forma Annual Depreciation Expense:

Operating Income Adjustment E - Test Year Depreciation Expense

LINE NO.	DESCRIPTION	[A] Plant In Service Per Staff	[B] NonDepreciable or Fully Depreciated Plant	[C] Depreciable Plant (Col A - Col B)	[D] Depreciation Rate	[E] Depreciation Expense (Col C x Col D)
1	301 - Organization Cost	\$ 3,950	\$ 3,950	-	0.00%	-
2	302 - Franchise Cost	\$ -	\$ -	-	0.00%	-
3	303 - Land and Land Rights	3,000	3,000	-	0.00%	-
4	304 - Structures and Improvements	\$44,129	-	\$ 44,129	3.33%	1,469
5	305 - Collecting and Impounding Res.	-	-	-	2.50%	-
6	306 - Lake River and Other Intakes	-	-	-	2.50%	-
7	307 - Wells & Spring	-	-	-	3.33%	-
8	308 - Infiltration Galleries and Tunnels	-	-	-	6.67%	-
9	309 - Supply Main	-	-	-	2.00%	-
10	310 - Power Generation Equip.	-	-	-	5.00%	-
11	311 - Electric Pumping Equipment	22,476	-	22,476	12.50%	2,810
12	320 - Water Treatment Equipment	-	-	-	-	-
13	320.1 Water Treatment Plants	85,561	-	85,561	3.33%	2,849
14	320.2 Solution Chemical Feeders	-	-	-	20.00%	-
15	330 - Distribution Resrvr & Standpipe	-	-	-	-	-
16	330.1 Storage Tanks	122,749	-	122,749	2.22%	2,725
17	330.2 Pressure Tanks	-	-	-	5.00%	-
18	331 - Transmission & Distr. Mains	19,523	19,523	-	2.00%	-
19	333 - Services	50,180	-	50,180	3.33%	1,671
20	334 - Meter & Meter Installations	5,265	4,451	814	8.33%	68
21	335 - Hydrants	-	-	-	2.00%	-
22	336 - Backflow Prevention Devices	-	-	-	6.67%	-
23	339 - Other Plant & Misc Equipment	-	-	-	6.67%	-
24	340 - Office Furniture and Fixtures	-	-	-	6.67%	-
25	340.1 Computers and Softwares	-	-	-	20.00%	-
26	341 - Transportation Equipment	-	-	-	20.00%	-
27	343 - Tools & Work Equipment	-	-	-	5.00%	-
28	345 - Power Operated Equipment	-	-	-	5.00%	-
29	346 - Communication Equipment	-	-	-	10.00%	-
30	347 - Miscellaneous Equipment	-	-	-	10.00%	-
31	348 - Other Tangible Plant	-	-	-	-	-
32	Total Plant	\$ 356,833	\$ 30,924	\$ 325,909		\$ 11,592
33						
34	Composite Depreciation Rate (Depr Exp / Depreciable Plant):					3.56%
35	CIAC:					\$ 287,103
36	Amortization of CIAC (Line 34 x Line 35):					\$ 10,212
37						
38	Pro Forma Annual Depreciation Expense					
39						
40	Plant in Service					\$ 356,833
41	Less: Non Depreciable Plant					\$ 6,950
42	Fully Depreciable Plant					23,974
43	Depreciable Plant					\$325,909
44	Times: Staff Proposed Depreciation Rate					3.56%
45	Depreciation Expense Before Amortization of CIAC:					\$ 11,592
46	Less Amortization of CIAC:					\$ 10,212
47	Test Year Depreciation Expense - Staff:					\$ 1,380
48	Depreciation Expense - Company:					\$ 14,285
49	Staff's Total Adjustment:					\$ (12,905)

Antelope Water Company

Docket No. W-02005A-13-0201

Test Year Ended: December 31 2012

Schedule BCA-3

Page 4 of 4

OPERATING INCOME ADJUSTMENT F - PROPERTY TAXES

LINE NO.	Property Tax Calculation	[A]	[B]
		STAFF AS ADJUSTED	STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues - 2012	\$ 29,301	\$ 33,606
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	\$ 58,602	\$ 67,212
4	Staff Recommended Revenue, Per Schedule BCA-1	29,301	33,606
5	Subtotal (Line 4 + Line 5)	\$ 87,903	\$ 100,818
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	\$ 29,301	\$ 33,606
8	Department of Revenue Multiplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	\$ 58,602	\$ 67,212
10	Plus: 10% of CWIP -	-	-
11	Less: Net Book Value of Licensed Vehicles	-	-
12	Full Cash Value (Line 9 + Line 10 - Line 11)	\$ 58,602	\$ 67,212
13	Assessment Ratio	22.5%	22.5%
14	Assessment Value (Line 12 * Line 13)	13,185	\$ 15,123
15	Composite Property Tax Rate (Obtained from Pima County)	11.613%	11.613%
16	Staff Proposed Property Tax Expense (Line 14 * Line 15)	\$ 1,531	
17	Company Proposed Property Tax	1,343	
18	Staff Test Year Adjustment (Line 16-Line 17)	\$ 188	
19	Property Tax - Staff Recommended Revenue (Line 14 * Line 15)		\$ 1,756
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		\$ 1,531
21	Increase/(Decrease) to Property Tax Expense		\$ 225
22	Decrease to Property Tax Expense		\$ 225
23	Increase in Revenue Requirement		12,915
24	Decrease to Property Tax per Dollar Increase in Revenue (Line 19/Line 20)		1.74%
F -	PROPERTY TAXES - Per Company	1,343	
	Per Staff	\$ 1,531	188

To reflect property tax expense using the Arizona Department of Revenue property method.

RATE DESIGN

Monthly Usage Charge	Current Rates	Company Proposed	Staff Recommended
5/8" x 3/4" Meter	\$11.50	\$17.50	\$ 13.50
3/4" Meter	13.00	19.00	13.50
1" Meter	20.00	26.00	33.75
1½" Meter	28.50	34.50	67.50
2" Meter	60.00	66.00	108.00
3" Meter	120.00	126.00	216.00
4" Meter	250.00	256.00	337.50
6" Meter	\$500.00	\$506.00	\$675.00

Gallons in Minimum	1,000	1,000	0
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Commodity Rates (Per 1,000 gallons)

All Meter Sizes

First Tier - 0 - 1,000 gallons	\$ -	N/A	N/A
Second Tier - Over 1,000 gallons	1.50	N/A	N/A

All Other Meter Sizes

First Tier - 0 - 1,000 gallons	N/A	\$ -	N/A
Second Tier - Over 1,000 gallons	N/A	\$ 1.50	N/A

All Meter Sizes

First Tier - 0 - 5,000 gallons	N/A	N/A	\$ 1.00
Second Tier - 5,001 - 15,000 gallons	N/A	N/A	1.40
Third Tier - Over 15,000 gallons	N/A	N/A	\$ 2.10

Service Line and Meter Installation Charges	Company Current Rates	Proposed Total Charges	—Staff Recommended—		
			Service Line Charges	Meter Charges	Total Charges
5/8" x 3/4" Meter	\$310	\$310	\$415	\$105	\$520
3/4" Meter	350	350	415	\$205	620
1" Meter	400	400	465	\$265	730
1½" Meter	610	610	0	0	ICB*
2" Meter Turbine	1,025	1,025	0	0	ICB*
3" Meter Turbine	1,405	1,405	0	0	ICB*
4" Meter Turbine	2,240	2,240	0	0	ICB*
6" Meter Turbine	\$4,345	\$4,345	\$0	\$0	ICB*

*Individual Case Basis at Cost

Service Charges

Establishment	\$ 20.00	\$ 20.00	\$ 20.00
Establishment (After Hours)	\$ 40.00	\$ 40.00	40.00
Reconnection (Delinquent)	\$ 40.00	\$ 40.00	\$ 40.00
Meter Test (If Correct)	\$ 30.00	\$ 30.00	\$ 30.00
Deposit	*	*	*
Deposit Interest Per Annum	*	*	*
Re-Establishment (Within 12 Months)	**	**	**
NSF Check	\$ 15.00	\$ 15.00	\$ 15.00
Deferred Payment - Per Month	1.50%	1.50%	1.50%
Meter Re-Read (If Correct)	\$ 10.00	\$ 10.00	\$ 10.00
Late Payment Charge-Per Month	1.50%	1.50%	1.50%
Service Charge (After Hours)	N/A	N/A	\$ 40.00

Monthly Service Charge for Fire Sprinkler

4" or Smaller	\$0.00	\$0.00	***
6"	0.00	0.00	***
8"	0.00	0.00	***
10"	0.00	0.00	***
Larger than 10"	0.00	0.00	***

* Per Commission Rules (R14-2-403.B)

** Number of months off system times the monthly minimum (R14-2-403(D).

*** 2.00% of monthly minimum for a comparable size meter connection but no less than \$10.00 per month. The service charge for fire sprinklers is only applicable for service lines separate and distinct from the primary water service line.

NT = No Tariff

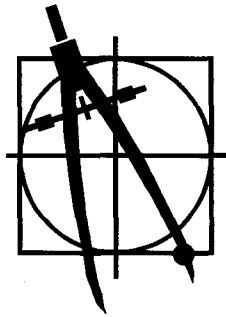
TYPICAL BILL ANALYSIS
5/8 x 3/4 - Inch Meter

Average Number of Customers: 63

<u>Company Proposed</u>	<u>Gallons</u>	<u>Present Rates</u>	<u>Proposed Rates</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
Average Usage	18,880	\$38.32	\$45.82	\$7.50	19.6%
Median Usage	10,919	\$26.38	\$33.88	\$7.50	28.4%
<u>Staff Recommended</u>					
Average Usage	18,880	\$38.32	\$40.65	\$2.33	6.1%
Median Usage	10,919	\$26.38	\$26.79	\$0.41	1.5%

Present & Proposed Rates (Without Taxes)
5/8 x 3/4 - Inch Meter

<u>Gallons Consumption</u>	<u>Present Rates</u>	<u>Company Proposed Rates</u>	<u>% Increase</u>	<u>Staff Proposed Rates</u>	<u>% Increase</u>
0	\$11.50	\$17.50	52.2%	\$13.50	17.4%
1,000	11.50	19.00	65.2%	14.50	26.1%
2,000	13.00	20.50	57.7%	15.50	19.2%
3,000	14.50	22.00	51.7%	16.50	13.8%
4,000	16.00	23.50	46.9%	17.50	9.4%
5,000	17.50	25.00	42.9%	18.50	5.7%
6,000	19.00	26.50	39.5%	19.90	4.7%
7,000	20.50	28.00	36.6%	21.30	3.9%
8,000	22.00	29.50	34.1%	22.70	3.2%
9,000	23.50	31.00	31.9%	24.10	2.6%
10,000	25.00	32.50	30.0%	25.50	2.0%
15,000	32.50	40.00	23.1%	32.50	0.0%
20,000	40.00	47.50	18.8%	43.00	7.5%
25,000	47.50	55.00	15.8%	53.50	12.6%
50,000	85.00	92.50	8.8%	106.00	24.7%
75,000	122.50	130.00	6.1%	158.50	29.4%
100,000	160.00	167.50	4.7%	211.00	31.9%
125,000	197.50	205.00	3.8%	263.50	33.4%
150,000	235.00	242.50	3.2%	316.00	34.5%
175,000	272.50	280.00	2.8%	368.50	35.2%
200,000	310.00	317.50	2.4%	421.00	35.8%



**ENGINEERING REPORT FOR
Antelope Water Company, Inc.**

**Docket No.
W-02005A-13-0201 (Rates)**

By Michael Thompson

September 4, 2013

CONCLUSIONS

1. The Arizona Corporation Commission ("ACC" or "Commission") Utilities Division Staff ("Utilities Staff" or "Staff") concludes that the Antelope Water Company, Inc. ("Antelope" or "Company") water system has inadequate storage to serve the present customer base.
2. The Arizona Department of Environmental Quality ("ADEQ") has reported that Antelope is currently delivering water that meets water quality standards required by 40 CFR 141 (National Primary Drinking Water Regulations) and Arizona Administrative Code, Title 18, Chapter 4.
3. The Arizona Department of Water Resources ("ADWR") has reported that Antelope is currently in compliance with departmental requirements governing water providers and/or community water systems.
4. The Antelope service area has not experienced any growth since 2006, and is expected to remain static through the next several years.
5. According to the Utilities Division Compliance Section database Antelope has no delinquent Commission compliance items.
6. Antelope has an approved Curtailment Tariff on file with the Commission.
7. Antelope has an approved Cross Connection/Backflow Tariff on file with the Commission.
8. The Antelope service area is not located within an ADWR Active Management Area (AMA).
9. Antelope and AEA Federal Credit Union ("AEA") have reached a resolution, regarding the issues associated with the failed development, in the form of a Water Service

Agreement ("Agreement"). AEA has signed the Agreement document; however, Antelope has not received the signed Agreement from AEA.

RECOMMENDATIONS

1. Staff recommends an annual water testing expense of \$1,322 be used for purposes of this application.
2. Staff recommends an annual certified operator expense of \$4,800 be used for purposes of this application.
3. Staff recommends that Antelope increase its storage capacity by a minimum of 15,000 gallons in order to meet the water demands of the current customer base. Staff further recommends that Antelope file with Docket Control, as a compliance item in this docket by December 31, 2014, a copy of the ADEQ Approval of Construction ("AOC") for the additional storage capacity.
4. Staff recommends that Antelope use the depreciation rates presented in Table B on a going forward basis.
5. Staff recommends approval of the charges for meters and service lines, and the adoption of the separate service line and meter installation charges listed under "Staff's Recommendation" in Table D.
6. Staff recommends that Antelope file with Docket Control, as a compliance item in this docket and within 90 days of the effective date of a decision in this proceeding, documentation demonstrating that the repair or replacement of the existing booster pump discharge pipe flow meter has been completed. Repairing or replacing the meter will provide usage figures that would enable Antelope to determine its system's water loss.
7. Staff recommends that Antelope begin monitoring water loss, on a monthly basis, by coordinating the readings of the booster pump discharge flow meter, filter backwash, and individual customer meters and reporting the results in its Commission Annual Reports going forward. Staff further recommends, in the event water loss reported in any Annual Report is greater than 10 percent, that Antelope shall prepare a report containing a detailed analysis and plan to reduce water loss to less than 10 percent.

If Antelope believes it is not cost effective to reduce the water loss to less than 10 percent, Antelope should submit a detailed cost benefit analysis to support its opinion. In no case shall the Company allow water loss to be greater than 15 percent. The water loss reduction report or the detailed analysis, whichever is submitted per this recommendation, shall be docketed as a compliance item no later than March 31st of the year following the excessive water loss.

8. Staff recommends that Antelope file with Docket Control, as a compliance item in this docket and within 90 days of the effective date of a decision in this proceeding, at least three BMPs in the form of tariffs that substantially conform to the templates created by Staff for Commission's review and consideration. The templates created by Staff are available on the Commission's website at <http://www.azcc.gov/Divisions/Utilities/forms.asp>. Staff further recommends that a maximum of two BMPs may come from the "Public Awareness/Public Relations" or "Education and Training" categories. The Company may request cost recovery of the actual costs associated with the BMPs implemented in its next general rate application.
9. Staff recommends that Antelope file with Docket Control, as a compliance item in this docket and within 90 days of the effective date of a decision in this proceeding, a copy of the Agreement signed by AEA and Antelope.

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A. INTRODUCTION AND LOCATION OF COMPANY

On June 20, 2013, Antelope Water Company, Inc. ("Antelope" or "Company") filed an application with the Arizona Corporation Commission ("ACC" or "Commission") to increase its rates (Docket No.W-02005A-13-0201). The Company's current rates were approved in Commission Decision No. 59440, dated December 20, 1995. The ACC Utilities Division Staff ("Utilities Staff" or "Staff") engineering review and analysis of the pending rate application is presented in this report.

Antelope is a Class E water utility company that provides public utility water service to 63 metered connections in a small subdivided area approximately 1 mile northeast of Wellton, Arizona. Wellton and nearby Tacna are agricultural communities, located approximately thirty miles east of the city of Yuma off Interstate Highway 8, in Yuma County, Arizona. The location of the Company, and the area covered by the Company's Certificate of Convenience and Necessity ("CC&N"), which covers just over 511 acres, are shown in Figures 1 and 2, respectively. The CC&N was granted in Commission Decision No. 39319 dated February 5, 1968.

B. DESCRIPTION OF THE WATER SYSTEM

The Antelope water system was visited on August 13, 2013, by Staff member Michael Thompson. Mr. Thompson was accompanied by Mr. John Kulberg. Mr. Kulberg currently handles the day-to-day operations of the Company. Mr. Joe Jimenez, the Company's Certified Operator, did not attend the inspection¹. The in-service plant (i.e. settling basin, tanks, pumps, and visible pipe) appeared to be in proper working order. The plant site was in reasonably good condition. However, the plant site was in need of general landscaping care.

Staff observed that an old pressure tank, no longer in use and disconnected from the system, is still located on the site. Staff also noticed that a new storage tank (approximately 50,000 gallons), and a new 2,500 gallon hydro-pneumatic pressure tank, neither of which are connected to the system, are located on site. A new 20-foot X 20-foot building, to be utilized to house new filters, is also located on site.

In 2008, a developer constructed a new sub-division within Antelopes CC&N with a loan from AEA Federal Credit Union ("AEA"). The developer never obtained an Approval to Construct ("ATC") the sub-division water system infrastructure from ADEQ, or submitted a Main Extension Agreement ("MXA") for approval from the ACC. The developer ultimately filed for bankruptcy leaving AEA with the new tanks and building located at the Antelope treatment plant site, the sub-division, and two model homes. The new tanks, new building, sub-

¹ Mr. Jimenez is a Certified Grade 2 Water Distribution System Operator and a Grade 2 Water Treatment Plant Operator, ADEQ Operator Identification No. OP021055.

division, and model homes, which are currently owned by AEA, are not included in Antelopes rate base.

Negotiations between Antelope and AEA regarding the issues associated with the failed development have been ongoing for several months. According to Mr. Kulberg, Antelope and AEA have finally reached a resolution, regarding the issues associated with the failed development, in the form of a Water Service Agreement ("Agreement"). Upon execution of the Agreement, AEA agrees to transfer possession and ownership of the 50,000 gallon storage tank, 2,500 gallon pressure tank, and a 20-foot x 20-foot metal building located at the Antelope treatment plant site to Antelope, and Antelope agrees to provide water service to five (5) lots within the new subdivision. AEA has signed the Agreement document; however, Antelope has not received the signed Agreement from AEA. Staff recommends that Antelope file with Docket Control, as a compliance item in this docket and within 90 days of the effective date of a decision in this proceeding, a copy of the Agreement signed by AEA and Antelope.

The Antelope treatment plant receives un-metered raw surface water from the Wellton Mohawk Irrigation and Drainage District ("WMIDD") via the Wellton-Mohawk Canal. Raw surface water flows, via gravity, from the canal through approximately 200 linear feet ("lf") of 6-inch underground transmission pipe to a raw water settling basin located at the treatment plant site.

Water level in the settling basin is controlled automatically by two (2) independent water float valves. Settled raw water is then pumped, via two (2) raw water pumps, from the raw water settling basin, through four (4) sand media filters connected in parallel, to a 41,400 gallon storage tank. The filters do not have a flow meter to record filter backwash discharges. The filtered water is chlorinated for disinfection prior to entering the storage tank. From the storage tank, the filtered and disinfected water is pressurized and delivered to the distribution system through a booster system consisting of two 15 horsepower booster pumps, and a 2,500 gallon pressure tank.

A flow meter, located on the discharge piping of the booster pumps, which would record flow from the plant site, is not operational. The distribution system consists of 8,000 lf of 6-inch transite water main and 1,500 lf of 2-inch PVC water main, which currently serve 63 metered connections.² There are no fire hydrants within the distribution system. A schematic of the water system is illustrated in Figure 3, and a detailed listing of the plant facilities is included in Table A.³

² Customer meter count based on discussions with the Company representative at the time of Staff's inspection. The Company representative indicated that 100 percent of these connections serve permanent residents.

³ Plant equipment was originally constructed in 1972. Improvements to the plant were made in 1998.

Table A. Plant Facilities Summary⁴

Source Data

ADWR System ID	91-000707-0000
ADEQ Public Water System #	14-001
Raw Water Supplier	Wellton Mohawk Irrigation & Drainage District*

*Raw water is provided from the Wellton-Mohawk Canal.

Water Tanks, Booster Systems, & Structures

Structure or Equipment	Location	Quantity – Capacity, Size
Settling Basin	Treatment Plant Site	1 – 28,000 gallons
Pressure Filters (parallel)	Treatment Plant Site	4 – 240 gpm each filter
Storage Tank	Treatment Plant Site	1 – 41,400 gallons
Pressure Tank	Treatment Plant Site	1 – 2,500 gallons
Distribution System Booster Pumps	Treatment Plant Site	2 – 3 hp (120 gpm each)
Raw Water Booster Pumps	Treatment Plant Site	2 – 15 hp (315 gpm each)
Chlorination System	Treatment Plant Site	1 – Chlorinator (gas system)
Security Fencing	Treatment Plant Site	1 – 6 Foot Chain Link

Distribution Mains

Diameter	Material	Length
2 inch	PVC	1,500 ft
6 inch	Transite*	8,000 ft

*Transite is a brand name for asbestos-cement pipe used in water distribution systems and in general construction.

Meters

Size	Quantity
5/8 x 3/4 inch	63

Fire Hydrants

Size/Description	Quantity
Standard	0

⁴ The information listed was based on one, or a combination of, the following sources: 1) Company's Application, 2) Commission Annual Reports, 3) Arizona Department of Water Resources Records, 4) Information contained in the Company's Response to a Staff Data Request, and 5) Information collected during Staff's site visit.

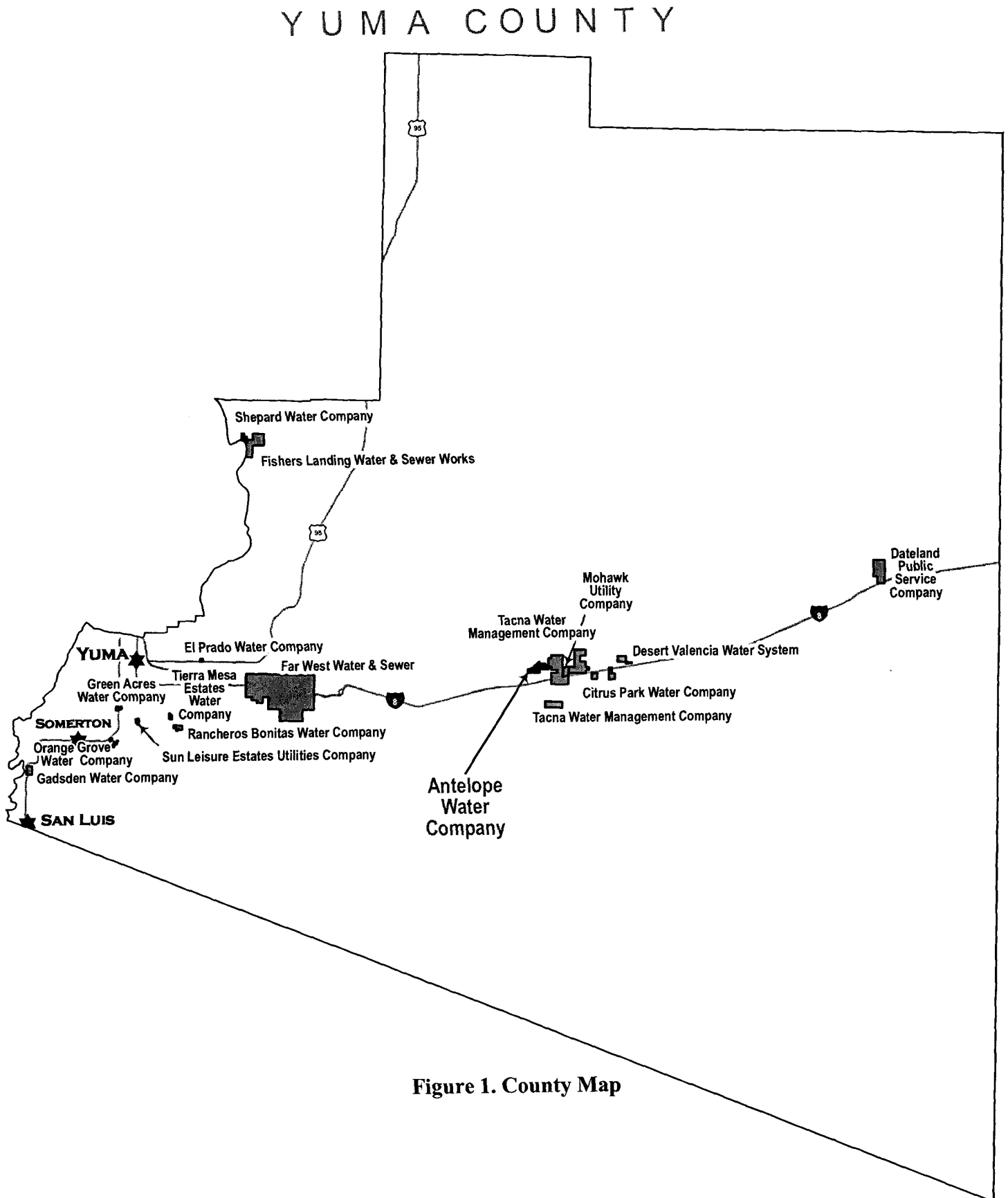


Figure 1. County Map

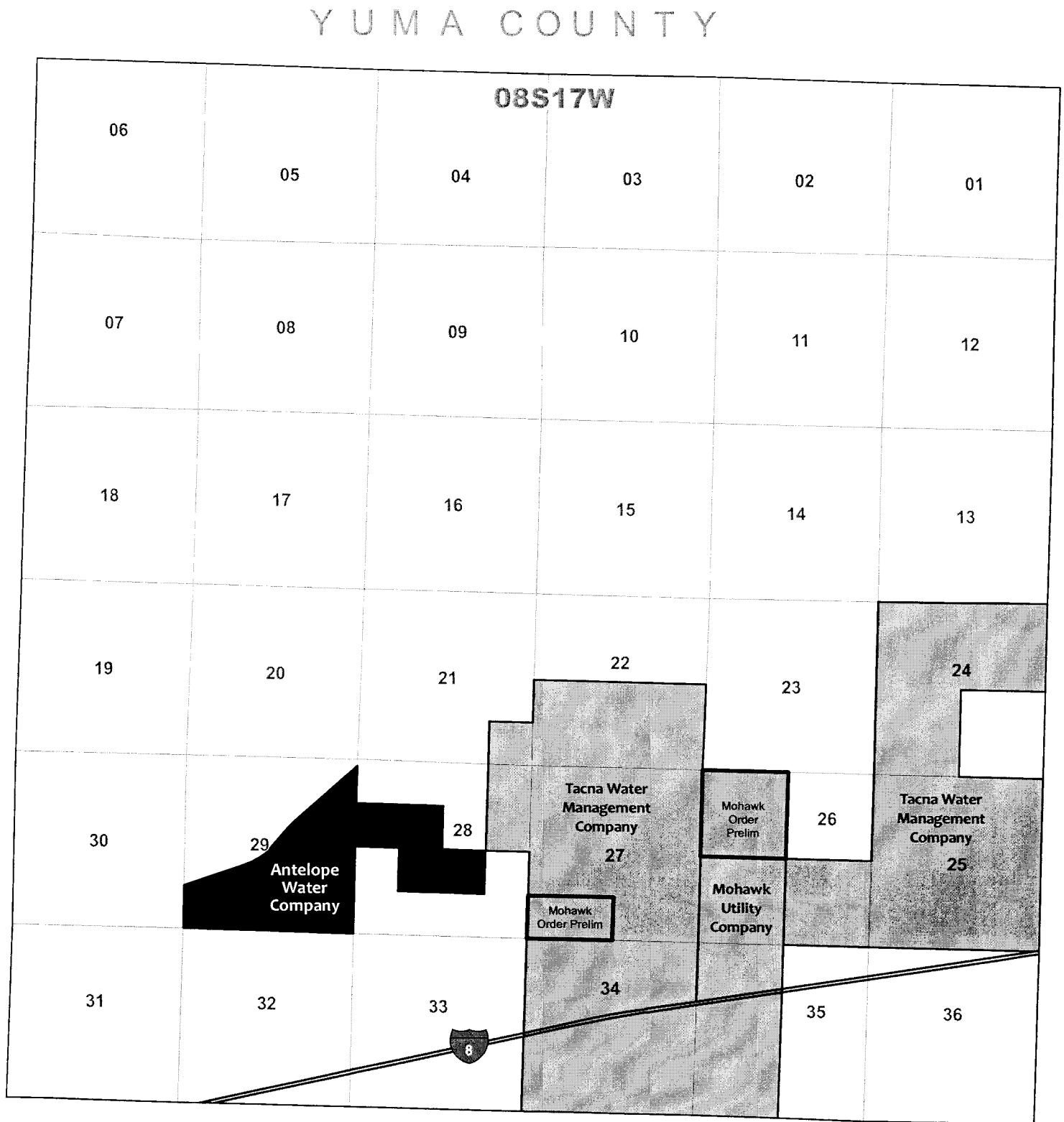


Figure 2. Certificated Area

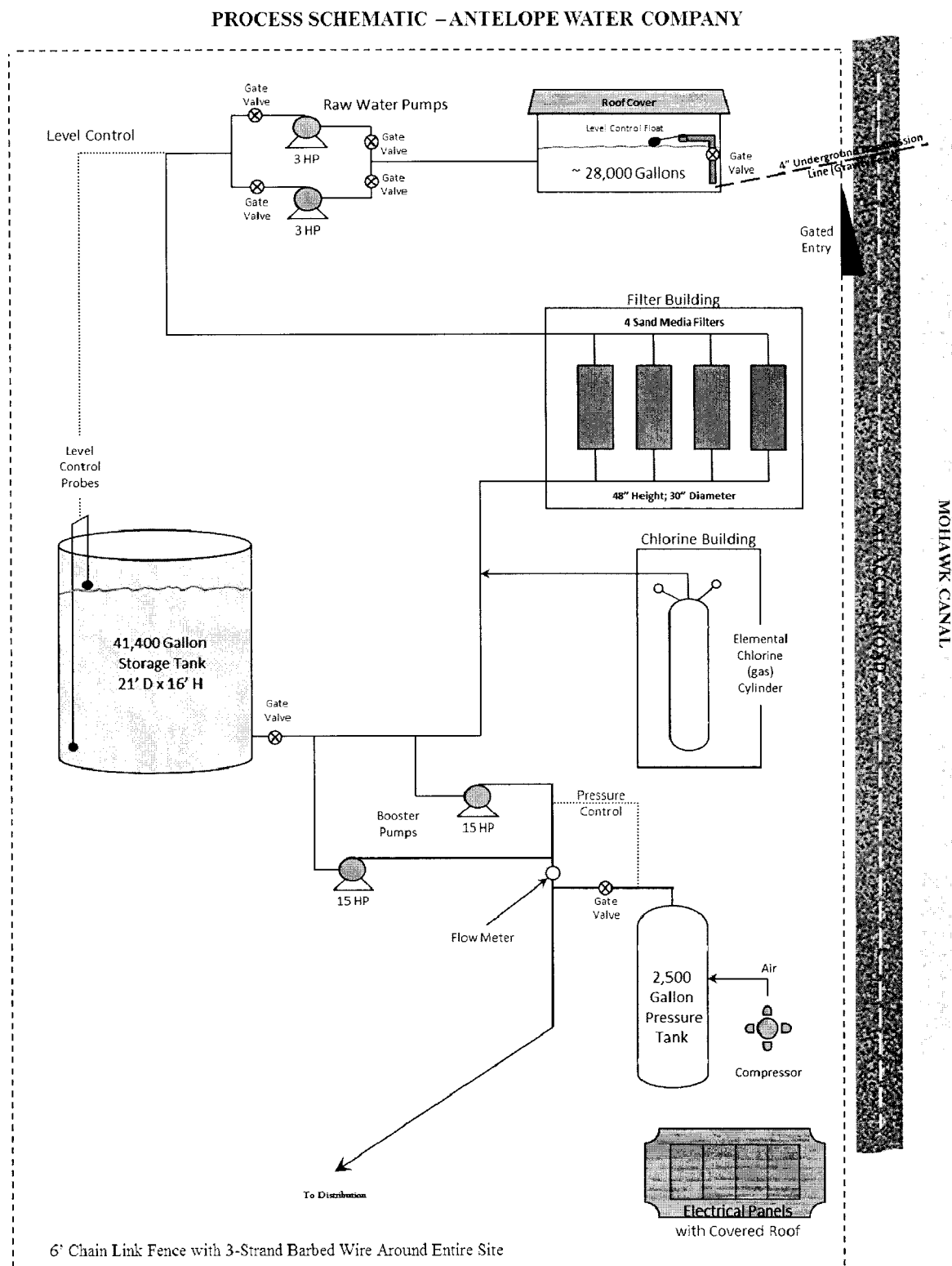


Figure 3. Water System Schematic

C. WATER USE

Water Purchased and Sold

Figure 4 represents the water consumption data provided by the Company for the test year ending December 31, 2012. Customer consumption included a high monthly water use of 879 gallons per day (“GPD”) per connection in May, and the low water use of 352 GPD per connection in January. The average daily demand during the twelve-month period was 613 GPD per connection. The Company reported 14,145,000 gallons of water sold during the test year.⁵

Raw surface water provided to the Antelope water system from WMIDD is un-metered. Since the raw surface water is un-metered, Antelope accounts for the quantity of raw surface water received from WMIDD from the combined total usage of the 63 service connections, i.e. customer meter reads, located within the Antelope water system service area.⁶

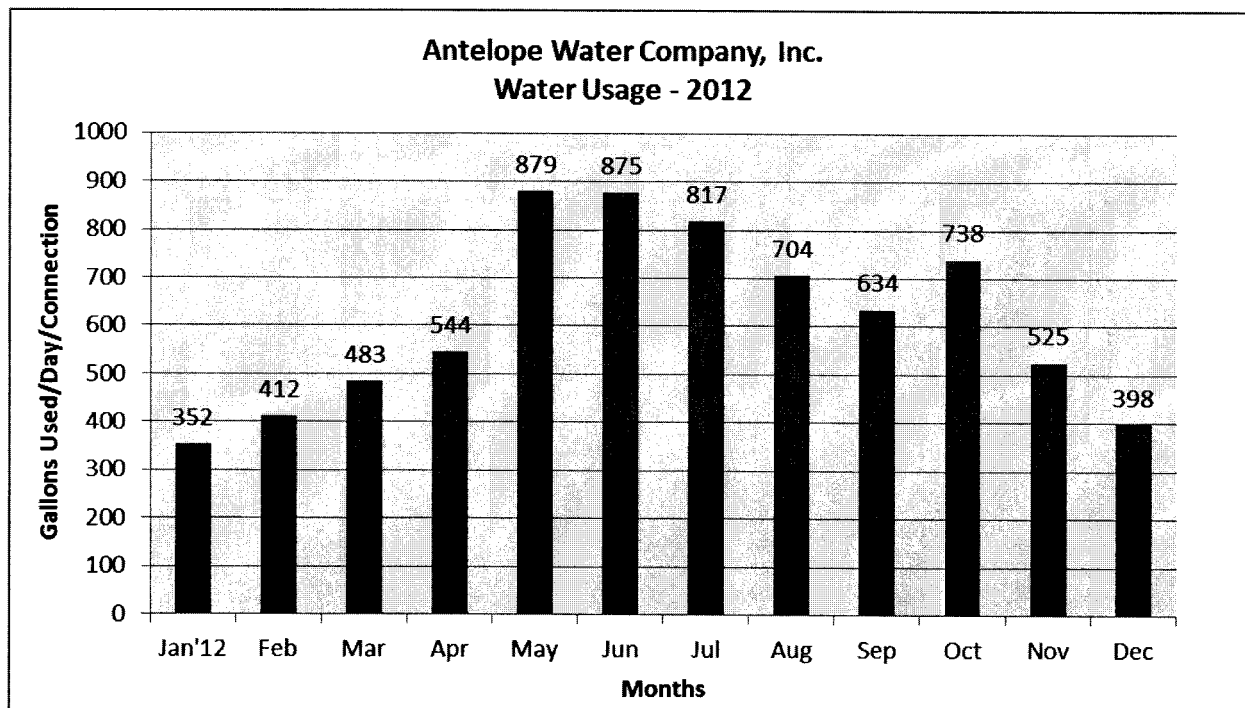


Figure 4. Water Use

⁵ Total water sold during the test year is based on the monthly data from the meter reads.

⁶ Antelope is currently allocated 200 acre feet of raw water/year from WMIDD. WMIDD charges Antelope 65% (130 acre feet or 42,367,000 gallons) of that allocation regardless of Antelope's actual usage. Antelope's actual usage, based on meter reads from 2005 to 2012, has averaged approximately 14,792,000 gallons/year, and has ranged between 12,577,000 and 17,698,000 gallons/year. Through an agreement made between Antelope and AEA Federal Credit Union (AEA) in 2009, Antelope and AEA are each charged 50% of the 130 acre feet, and pay accordingly.

Non-accounted For Water

Non-accounted for water should be 10 percent or less. It is important to be able to reconcile the difference between water sold and the water provided by the source, i.e. WMIDD. A water balance will allow a company to identify water and revenue losses due to leakage, theft, filter backwashing, and flushing.

Currently, the Antelope water system does not have a source/production meter. However, an inoperable flow meter located on the booster pump discharge piping, if repaired or replaced, could provide usage figures. As a result, Antelope management is unable to determine the water system's water loss.

Staff recommends that Antelope install a source/production meter at the raw water pump station, or repair/replace the existing booster pump flow meter. Staff recommends that Antelope begin monitoring water loss, on a monthly basis, by coordinating the readings of the booster pump discharge flow meter, filter backwash, and individual customer meters and reporting the results in its Commission Annual Reports going forward. Staff further recommends, in the event water loss reported in any Annual Report is greater than 10 percent, that Antelope shall prepare a report containing a detailed analysis and plan to reduce water loss to less than 10 percent.

If Antelope believes it is not cost effective to reduce the water loss to less than 10 percent, Antelope should submit a detailed cost benefit analysis to support its opinion. In no case shall the Company allow water loss to be greater than 15 percent. The water loss reduction report or the detailed analysis, whichever is submitted per this recommendation, shall be docketed as a compliance item no later than March 31st of the year following the excessive water loss.

System Analysis

The Antelope water system receives all of its water from the Wellton-Mohawk Canal. Daily production is unknown since raw surface water received from the canal is un-metered. The water system currently has 41,400 gallons of storage capacity. There are no fire hydrants in the distribution system and the system is not subject to a formal fire flow requirement. The system had 63 customers during the peak month, (May 2012), when the Company reported 1,717,000 gallons sold. Based on those figures, average daily demand for the month of May 2012 was determined to be 55,387 gallons/day, which equates to a storage capacity shortage of 13,987 gallons.

According to Arizona Administrative Code ("A.A.C.") R18-5-503, the minimum storage capacity for a community water system or a non-community water system that serves a residential population or a school shall be equal to the average daily demand during the peak month of the year. Staff concludes that the Antelope water system does not have adequate storage capacity, during peak demand periods, to serve the present customer base and any

potential growth. Staff recommends that Antelope increase its storage capacity by a minimum of 15,000 gallons in order to meet the water demands of the current customer base. Staff further recommends that Antelope file with Docket Control, as a compliance item in this docket by December 31, 2014, a copy of the ADEQ Approval of Construction ("AOC") for the additional storage capacity. The installation of the AEA storage tank would rectify the storage inadequacy.

D. GROWTH

The number of customers served by Antelope has remained static since 2006. Antelope reported 63 customers served in 2006 and 63⁷ customers served year end 2012. Antelope currently serves 62 residential customers and a church. The Company does not anticipate a change in its customer base. The number of customers served from 2006 through 2012 is based on the data reported by the Company in its annual reports submitted to the Commission.

E. ADEQ COMPLIANCE

Compliance

ADEQ regulates the Antelope water system under ADEQ Public Water System Identification ("PWS ID") No. 14-001. ADEQ inspected the water system on August 3, 2010 and August 2, 2011. During both inspections no deficiencies were found in the operation, maintenance, or certified operator status of the water system.

ADEQ Compliance Status Report, dated August 26, 2013, indicates that the Antelope water system has no major monitoring or reporting deficiencies, and is currently delivering water that meets water quality standards required by 40 CFR 141 (National Primary Drinking Water Regulations) and Arizona Administrative Code, Title 18, Chapter 4.

Water Testing Expense

In addition to Total Coliform, Lead & Copper, and Disinfection-By-Products testing, Antelope is also subject to mandatory participation in the Monitoring Assistance Program ("MAP").⁸ Antelope reported water testing expenses of \$1,442.00 (including the MAP fee), and certified operator expenses of \$4,800.00, during the test year. Invoices for these expenses have a combined total cost of \$6,242.00. The water testing expenses include an additional Trihalomethane ("TTHM") sample that was tested, at a cost of \$120, since the original sample that was taken exceeded the expiration date prior to reaching the lab. The monitoring and testing expenses that were reviewed, evaluated, and recalculated by Staff are represented in Table B. Staff recommends an annual water testing expense of \$1,322, and certified operator expense of \$4,800, equaling a total of \$6,122 to be used for purposes of this application.

⁷ See number of customers listed under water use data on page 18 of the Application.

⁸ The MAP program is mandatory for water systems, which serve less than 10,000 persons (approximately 3,300 service connections).

Table B. Water Testing Cost

Monitoring	Cost per Test	Quantity of Tests per 3 years	Annual Testing Cost	Certified Operator Annual Fee	Total Annual Costs
Total Coliform	\$30	36 (Note 1)	\$360	\$4,800	\$5,160
MAP – IOCs, Radiochemical, Nitrate, Nitrite, Asbestos, SOCs, & VOCs	MAP	MAP	\$412 (Note 2)	-	\$412
Lead & Copper	\$40	5 (Note 3)	\$200	-	\$200
Disinfection Byproducts (TTHM & HAA5)	\$350	3 (Note 4)	\$350	-	\$350
Total Annual Cost	-	-	\$1,322	\$4,800	\$6,122

Notes: 1) Assumes one test monthly (based on one Point of Entry), 2) The ADEQ MAP invoice for Calendar Year 2012 was \$411.91, and 3) Assumes lead and copper testing will remain at 5 tests triennially, 4) Assumes one test per year.

F. ARIZONA DEPARTMENT OF WATER RESOURCES (“ADWR”) COMPLIANCE

The Antelope service area is not located within an ADWR Active Management Area (“AMA”). ADWR has determined that Antelope Water Company is currently in compliance with departmental requirements governing water providers and/or community water systems.⁹

G. ACC COMPLIANCE

A check of the Utilities Division Compliance Section database showed that there are no delinquent Commission compliance items for Antelope.¹⁰

H. DEPRECIATION RATES

Antelope has been using a depreciation rate of 5.00 % for most plant categories. Staff’s typical and customary depreciation rates, which vary by National Association of Regulatory Utility Commissioners (“NARUC”) plant categories, are illustrated in Table C. These rates represent typical and customary values within a range of anticipated equipment life. Staff recommends that Antelope use the depreciation rates presented in Table C.

⁹ Per ADWR Water Provider Compliance Status Report dated July 1, 2013.

¹⁰ Per Compliance Section email dated July 1, 2013.

Table C. Depreciation Rate Table for Water Companies

NARUC Acct. No.	Depreciable Plant	Average Service Life (Years)	Annual Accrual Rate (%)
304	Structures & Improvements	30	3.33
305	Collecting & Impounding Reservoirs	40	2.50
306	Lake, River, Canal Intakes	40	2.50
307	Wells & Springs	30	3.33
308	Infiltration Galleries	15	6.67
309	Raw Water Supply Mains	50	2.00
310	Power Generation Equipment	20	5.00
311	Pumping Equipment	8	12.5
320	Water Treatment Equipment		
320.1	Water Treatment Plants	30	3.33
320.2	Solution Chemical Feeders	5	20.00
320.3	Point-of-Use Treatment Devices	10	10.00
330	Distribution Reservoirs & Standpipes		
330.1	Storage Tanks	45	2.22
330.2	Pressure Tanks	20	5.00
331	Transmission & Distribution Mains	50	2.00
333	Services	30	3.33
334	Meters	12	8.33
335	Hydrants	50	2.00
336	Backflow Prevention Devices	15	6.67
339	Other Plant & Misc Equipment	15	6.67
340	Office Furniture & Equipment	15	6.67
340.1	Computers & Software	5	20.00
341	Transportation Equipment	5	20.00
342	Stores Equipment	25	4.00
343	Tools, Shop & Garage Equipment	20	5.00
344	Laboratory Equipment	10	10.00
345	Power Operated Equipment	20	5.00
346	Communication Equipment	10	10.00
347	Miscellaneous Equipment	10	10.00
348	Other Tangible Plant	---	-----

I. OTHER ISSUES

1. Service Line and Meter Installation Charges

Antelope did not propose to increase its existing service line and meter installation charges.¹¹ The existing charges are below Staff's typical range for these charges. Therefore, Staff believes that an increase in Antelope's meter and service line charges is needed and Antelope agrees. The charges listed under "Staff's Recommendation", in Table D, are within Staff's typical range for these charges.

Since Antelope may at times install meters on existing service lines, it would be appropriate for some customers to only be charged for the meter installation. The increase in total charges for meters and service lines, recommended by the Staff, were utilized to develop separate service line and meter charges. Staff recommends that meter sizes 1 1/2 inches and larger be priced on an individual case basis ("ICB") at cost. Staff further recommends that the charges listed under "Staff's Recommendation" in Table D be adopted.

Table D. Service Line and Meter Installation

Meter Size	Company Current Tariff	Company Proposed			Staff's Recommendation		
		Service Line Charge	Meter Charge	Total Charge	Service Line Charge	Meter Charge	Total Charge
5/8 x 3/4-inch	\$310	-	-	\$310	\$415	\$105	\$520
3/4-inch	\$350	-	-	\$350	\$415	\$205	\$620
1-inch	\$400	-	-	\$400	\$465	\$265	\$730
1-1/2-inch	\$610	-	-	\$610	-	-	ICB*
2-inch Turbine	\$1,025	-	-	\$1,025	-	-	ICB*
3-inch Turbine	\$1,405	-	-	\$1,405	-	-	ICB*
4-inch Turbine	\$2,240	-	-	\$2,240	-	-	ICB*
6-inch Turbine	\$4,345	-	-	\$4,345	-	-	ICB*

*Individual Case Basis at cost

2. Curtailment Tariff

Antelope has an approved Curtailment Tariff on file with the Commission.

3. Backflow Prevention Tariff

Antelope has an approved Backflow Prevention Tariff on file with the Commission.

¹¹ The Company's current service line and installation charges were approved in Decision No. 59440.

4. Best Management Practices ("BMP") Tariff

Staff recommends that Antelope file with Docket Control, as a compliance item in this docket and within 90 days of the effective date of a decision in this proceeding, at least three BMPs in the form of tariffs that substantially conform to the templates created by Staff for Commission's review and consideration. The templates created by Staff are available on the Commission's website at <http://www.azcc.gov/Divisions/Utilities/forms.asp>. Staff further recommends that a maximum of two (2) BMPs may come from the "Public Awareness/Public Relations" or "Education and Training" categories. The Company may request cost recovery of the actual costs associated with the BMPs implemented in its next general rate application.